

## PCT COOPERATION TREATY

PCT

NOTIFICATION OF RECEIPT OF  
RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

FUKAMI, Hisao  
Sumitomo Bank Minamimori-machi  
Building  
1-29, Minamimori-machi 2-chome  
Kita-ku  
Osaka-shi  
Osaka 530-0054  
JAPON

Date of mailing (day/month/year) 01 December 1999 (01.12.99)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 999425	International application No. PCT/JP99/06253

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

NTN CORPORATION et al (for all designated States except US)  
ITOU, Katsunori et al (for US)

International filing date : 10 November 1999 (10.11.99)  
Priority date(s) claimed : 11 November 1998 (11.11.98)  
Date of receipt of the record copy  
by the International Bureau : 29 November 1999 (29.11.99)  
List of designated Offices :

National : CA, DE, KR, US


## ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- ☒ time limits for entry into the national phase
- ☒ confirmation of precautionary designations
- ☒ requirements regarding priority documents

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer: Susumu Kubo  Telephone No. (41-22) 338.83.38
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## PCT COOPERATION TREATY

PCT



**NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT**

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

FUKAMI, Hisao  
Sumitomo Bank Minamimori-machi  
Building  
1-29, Minamimori-machi 2-chome  
Kita-ku  
Osaka-shi  
Osaka 530-0054  
JAPON

Date of mailing (day/month/year) 01 February 2000 (01.02.00)	
Applicant's or agent's file reference 999425	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/JP99/06253	International filing date (day/month/year) 10 November 1999 (10.11.99)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 11 November 1998 (11.11.98)
Applicant NTN CORPORATION et al	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, **the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.**
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, **the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.**

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
11 Nove 1998 (11.11.98)	10/320435	JP	06 Janu 2000 (06.01.00)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer

Taïeb Akremi

Telephone No. (41-22) 338.83.38

# PATENT COOPERATION TREATY

PCT



From the INTERNATIONAL BUREAU

## NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

FUKAMI, Hisao  
Sumitomo Bank Minamimori-machi  
Building  
1-29, Minamimori-machi 2-chome  
Kita-ku  
Osaka-shi  
Osaka 530-0054  
JAPON

Date of mailing (day/month/year) 18 May 2000 (18.05.00)		IMPORTANT NOTICE	
Applicant's or agent's file reference 999425			
International application No. PCT/JP99/06253	International filing date (day/month/year) 10 November 1999 (10.11.99)	Priority date (day/month/year) 11 November 1998 (11.11.98)	
Applicant NTN CORPORATION et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:  
CA,DE

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 18 May 2000 (18.05.00) under No. WO 00/28102

### REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

### REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. (41-22) 740.14.35</p>	<p>Authorized officer J. Zahra</p> <p>Telephone No. (41-22) 338.83.38</p>
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## PCT COOPERATION TREATY

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From the INTERNATIONAL BUREAU

To:

**NOTIFICATION CONCERNING  
THE FILING OF AMENDMENTS OF THE CLAIMS**  
(PCT Administrative Instructions, Section 417)

FUKAMI, Hisao  
Sumitomo Bank Minamimori-machi  
Building  
1-29, Minamimori-machi 2-chome  
Kita-ku  
Osaka-shi  
Osaka 530-0054  
JAPON

<b>Date of mailing</b> (day/month/year) 13 April 2000 (13.04.00)	
<b>Applicant's or agent's file reference</b> 999425	<b>IMPORTANT NOTIFICATION</b>
<b>International application No.</b> PCT/JP99/06253	<b>International filing date</b> (day/month/year) 10 November 1999 (10.11.99)
<b>Applicant</b> NTN CORPORATION et al	

1. The applicant is hereby notified that amendments to the claims under Article 19 were received by the International Bureau on:

28 March 2000 (28.03.00)

2. This date is within the time limit under Rule 46.1.

Consequently, the international publication of the international application will contain the amended claims according to Rule 48.2(f), (h) and (i).

3. The applicant is reminded that the international application (description, claims and drawings) may be amended during the international preliminary examination under Chapter II, according to Article 34, and in any case, before each of the designated Offices, according to Article 28 and Rule 52, or before each of the elected Offices, according to Article 41 and Rule 78.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorised officer

Susumu Kubo  
Telephone No.: (41-22) 338.83.38

# PATENT COOPERATION TREATY

**PCT**

## NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

FUKAMI, Hisao  
Sumitomo Bank Minamimori-machi  
Building  
1-29, Minamimori-machi 2-chome  
Kita-ku  
Osaka-shi  
Osaka 530-0054  
JAPON

Date of mailing (day/month/year)  
01 August 2000 (01.08.00)

Applicant's or agent's file reference  
999425

### IMPORTANT NOTIFICATION

International application No.  
PCT/JP99/06253

International filing date (day/month/year)  
10 November 1999 (10.11.99)

1. The following indications appeared on record concerning:

☒ the applicant    ☐ the inventor    ☐ the agent    ☐ the common representative

Name and Address  
DAIDO STEEL CO., LTD.  
11-18, Nishiki 1-chome, Naka-ku  
Nagoya-shi, Aichi 460-0003  
Japan

State of Nationality  
JP

State of Residence  
JP

Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☒ the person    ☐ the name    ☐ the address    ☐ the nationality    ☐ the residence

Name and Address

State of Nationality

State of Residence

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

**The applicant identified in Box 1 should be deleted as an applicant of record.**

4. A copy of this notification has been sent to:

☒ the receiving Office    ☒ the designated Offices concerned  
☐ the International Searching Authority    ☐ the elected Offices concerned  
☐ the International Preliminary Examining Authority    ☐ other:

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Susumu Kubo

Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38

PCT

世界知的所有権機関  
国際事務局

特許協力条約に基づいて公開された国際出願

(51) 国際特許分類7 C22C 38/50	A1	(11) 国際公開番号 WO00/28102  (43) 国際公開日 2000年5月18日(18.05.00)
(21) 国際出願番号 PCT/JP99/06253  (22) 国際出願日 1999年11月10日(10.11.99)  (30) 優先権データ 特願平10/320435 1998年11月11日(11.11.98) JP  (71) 出願人 (米国を除くすべての指定国について) エヌティエヌ株式会社(NTN CORPORATION)[JP/JP] 〒550-0003 大阪府大阪市西区京町堀1丁目3番17号 Osaka, (JP) 大同特殊鋼株式会社(DAIDO STEEL CO., LTD.)(JP/JP) 〒460-0003 愛知県名古屋市中区錦一丁目11番18号 Aichi, (JP)  (72) 発明者 ; および (75) 発明者 / 出願人 (米国についてのみ) 伊藤勝教(ITU, Katsunori)[JP/JP] 前田喜久男(MAEDA, Kikuo)[JP/JP] 〒511-0811 三重県桑名市大字東方字尾弓田3066 エヌティエヌ株式会社内 Mie, (JP) 木南俊哉(KINAMI, Toshiya)[JP/JP] 中村貞行(NAKAMURA, Sadayuki)[JP/JP] 〒457-0811 愛知県名古屋市中南区大同町2丁目30番地 大同特殊鋼株式会社内 Aichi, (JP)	(74) 代理人 深見久郎, 外(FUKAMI, Hisao et al.) 〒530-0054 大阪府大阪市北区南森町2丁目1番29号 住友銀行南森町ビル Osaka, (JP)  (81) 指定国 CA, DE, KR, US  添付公開書類 国際調査報告書 補正書	
<p>(54)Title: HIGH-TEMPERATURE ROLLING BEARING PART</p> <p>(54)発明の名称 高温用転がり軸受部品</p> <p>(57) Abstract</p> <p>A high-temperature rolling bearing part which consists of a steel material containing in alloy element mass % at least 0.6 to up to 1.3 % of C, at least 0.3 to up to 3.0 % of Si, at least 0.2 % to up to 1.5 % of Mn, up to 0.03 % of P, up to 0.03 % of S, at least 0.3 to up to 5.0 % of Cr, at least 0.1 to up to 3.0 % of Ni, up to 0.05 % of Al, up to 0.003 % of Ti, up to 0.0015 % of O, up to 0.015 % of N and the remaining components of Fe and unavoidable impurities, and which has a construction obtained by being tempered after hardened or carbonitrided, with a temper hardness of at least HRC 58 and a maximum carbide size of up to 8 <math>\mu</math>m, whereby a high-temperature rolling bearing part is provided that has an excellent rolling fatigue life even in foreign matter-mixed and high-temperature environments and is less c stly.</p>		